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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,835	10/20/2005	Ruggero Mattiello	B43-015	6308
28156 7590 12/21/2006 COLEMAN SUDOL SAPONE, P.C. 714 COLORADO AVENUE BRIDGE PORT, CT 06605-1601			EXAMINER MAHONE, KRISTIE ANNETTE	
			ART UNIT 3751	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/21/2006	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/553,835	<b>Applicant(s)</b> MATTIELLO, RUGGERO	
	<b>Examiner</b> Kristie A. Mahone	<b>Art Unit</b> 3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/30/2006</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the flow gauge (Claim 6), the vibrator (Claim 7), float ball (Claim 7), motor drive three way valve (Claim 8); and flow display (Claim 10) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 334 (page 8, line 10)

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention.

6. Claim 6 recites a "flow gauge" located either upstream or downstream of the aspirator. The disclosure fails to state or teach what structure constitutes the recited flow gauge or how the flow gauge is operationally connected with the aspirator. Furthermore, it is unclear how the flow gauge "notes the passage of air." Without more, one skilled in the art can not make or use the claimed invention without undue experimentation.

7. With respect to Claim 7, after a through review of the disclosure, it is unclear how the vibrator, flow gauge, and float ball are interconnected to perform as claimed; i.e. effectuate release of the float ball. Absent a detailed description or illustration of the operative connections between the recited structures, a person ordinary skill in the art would be unable to assemble the invention as claimed without undue experimentation.

8. Claims 6-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 6 recites the limitation "a flow gauge." Applicant's failure to provide illustration and detailed written description explaining what structure constitutes the recited "flow gauge"

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renders the claim vague and indefinite. The scope of the invention sought to be patented can not be fully understood from the language of the claims. For the purpose of the following art rejection, the recited flow gauge is understood as any automatic control for terminating ventilation in the presence of moisture in the path of the aspirator. Examiner cites Applicant's Disclosure at page 5, lines 14-21 as a justification for this rationale.

10. Claim 7 recites a "vibrator associated with said flow gauge...". Applicant's failure to provide illustration and detailed written description regarding what structure constitutes the recited vibrator renders the claim vague and indefinite. The scope of the invention sought to be claimed cannot be fully understood from the claim language.

11. Further regarding Claim 7, the limitation "the float ball" appears in line 3. Such recitation renders the claim indefinite because there is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 2,3,4, 9,13,14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gandini (5,044,018).

With respect to independent claim 15, the Gandini reference discloses an aspirating apparatus for toilets comprising an aspirating means (13) with an inlet (11) and an outlet (17). [See Fig 1; Col 2, lines 32-38]. As shown, Gandini's outlet (17) leads outside of the toilet room; i.e. via outlet 20. [Col. 2, lines 48-55]

The aspirator inlet (11) is operationally connected to a pair of aspirating ducts (10, including openings 100) provided in the walls of a toilet bowl (9) [Fig. 2; Col.2; line 16-20]. Gandini's ducts lead to a cavity defined by the interior of the bowl, allowing the aspiration of foul odors from the interior of the bowl. [See Col 1. lines 30-34]. As schematically shown in Figure 3, the aspirating ducts (10) are provided in the walls of the bowl (9); i.e. a curved portion of the bowl. Aspirating openings (100), communicating with the bowl cavity towards the outfall area (3), are distributed along the aspirating ducts (10).

Gandini's aspirator inlet (11) is operationally connected to the outlet pipe of the flush box (7). The outlet pipe leads to a ring duct (110, including openings 8) which supplies water to the bowl (9). [Col. 2; lines 8-15]

Regarding claim 2, as shown, Gandini's system includes two aspirating ducts (10, including openings 100) departing from the back wall of the bowl (9). The aspirating ducts are connected to the aspirating means (13) via piping 11. [See Figs 1-2]. Regarding the limitation in lines 5-6, the area beneath the top of the basin (16) is deemed a "side wall" of the bowl; i.e. defines the sides of the bowl. Since ducts 10 are integrated into the bowl proximate to the outfall area (3), they deemed to extend along the sidewall of the bowl as claimed. And as noted above, aspirating openings (100) are distributed along the ducts (10). [See Fig. 2].

Regarding claim 3, Gandini's valve 18, located downstream of aspirator (13), is capable of preventing backflow of water.

Regarding claim 4, Gandini's aspirator outlet (17) may be conveyed to the bowl sewer conduit (3) of the toilet bowl, which is downstream of toilet bowl siphon (proximate 111) [Fig. 1]. Further, Gandini's system comprises a flow interception means between sewer conduit 3 and the outlet pipe of flush box (7); i.e. valve 18.

Regarding claim 9, Gandini's flow interception means comprises a motor drive valve (18) positioned down stream of aspirator (13) capable providing bi-directional flow blockage. [See Fig 1; p. 4, lines 62-68].

Regarding claim 13, as explained above Gandini's valve 18 is capable of preventing backflow.

Regarding claim 14, as shown in Figure 1, Gandini's aspirator (13) is connected to a bowl exhalation valve (21); i.e. via piping (17).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gandini (as discussed above) in view of Salvagno (WO 01/86080 ). The Gandini reference does not disclose a valve upstream of the aspirator. However, Salvagno teaches another aspirating apparatus wherein the flow interception means includes valve 23, located upstream of the aspirator, which is held in an open position when the aspirator is activated. [Figure 1]

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the

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invention made to have modified Gandini with a valve upstream of the aspirator, as taught by Salvagno, to allow and control air flow into the aspirator.

16. Claim 6, as presently understood, is rejected under 35 U.S.C 103 (a) as being unpatentable over Gandini, as modified by Salvagno, (as discussed above) in view of Pearson (4,007,498). Gandini as modified by Salvagno shows electronically controlled aspirating apparatus having all of the features claimed except a "flow gauge" operationally connected with the aspirator. However, Pearson teaches another aspirating apparatus which is equipped with an automatic control (27) for terminating the aspirator (22) when moisture is present in a conduit coupled with the aspirator. [See Figs 1-2; Abstract]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Gandini as modified by Salvagno, with an automatic aspirator control, as taught by Pearson, to prevent damage to the aspirator by moisture in the air stream.

17. Claim 7 is rejected under 35 U.S.C 103 (a) as being unpatentable over Gandini, as modified by Salvagno and Pearson (as discussed above) in view of Applicant's admitted prior art [Disclosure page 5, lines 21-23-page 6, line 1]. The modified Gandini reference shows the claimed invention, except for a vibrator. However, Applicant has admitted that the claimed vibrator (and claimed valve) are of known type. Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to have modified Gandini as modified by Salvagno and Pearson with the known vibrator, to dislodge the valve float when it becomes trapped in the valve seat.

18. Claim 8, as presently understood, is rejected under 35 U.S.C. 103(a) as being unpatentable Gandini as modified by Salvagno (as discussed above) in view of Applicant's admitted prior art. [Disclosure page 9, lines 15-17]. Gandini as modified by Salvagno shows an aspirating apparatus having a valve upstream of the aspirator, but does not disclose that such



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valve is a motor driven three way valve. However, applicant has admitted that the claimed motor driven three way valve is known in the art and may replace a one-way valve. Therefore, because the claimed motor driven three way valve is known in the art and is a recognized equivalent of the one-way valve taught by Gandini as modified by Salvago, one of ordinary skill in the art would have found it obvious at the time of invention was made to have substituted the known three-way valve for the one way valve shown by the modified Gandini reference

19. Claim 8, as presently understood, is also rejected under 35 U.S.C. 103(a) as being unpatentable over Gandini (as discussed above) in view of Valdespino (3,568,216) and Cabalfin (5,226,454). Gandini discloses a motor driven aspirating apparatus having all of the features as claimed, except a motor-driven-three way valve. The Valdespino reference teaches another aspirating apparatus with a three-way valve (16) located upstream of the aspirator that rotates to allow air to be drawn towards an aspirator (41) . [Figure 1; Col. 3, lines 41-44]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Gandini with a three-way valve, as taught by Valdespino, to control air flow into the aspirator.

Gandini as modified by Valdespino shows an aspirator with a three-way valve upstream of the aspirator, but does not show a motor for actuating such valve. However, Cabalfin teaches that motor actuated valves are known. [Col. 1, lines 12-13] Therefore, it would have been obvious to a person of ordinary skill in the art to have modified Gandini as modified by Valdespino, with a motor for actuating the three-way valve, as taught by Cabalfin, to provide for powerful and efficient valve actuation. Furthermore, it is well settled that it is not "invention" to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result. In re Venner, 120 USPQ 192.

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20. Claim 10, as presently understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Gandini (as discussed above) in view of applicant's admitted prior art [Disclosure, page 6, lines 4-5]. Gandini discloses an electrically operated aspirating apparatus having all the features claimed except a flow display. However, Applicant has admitted that the claimed flow display is of known type. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Gandini with a flow display, to indicate to the user that the aspirator is activated or functioning properly.

21. Claims 11-12, as presently understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gandini (as discussed above) in view of Stone (2003/0163863). Gandini discloses an electrically operated aspirating apparatus having all the features claimed except a presence sensor using a photocell, and a time switch. However, the Stone reference teaches another toilet ventilation system having light recognition activation switch (76) using photocells which is responsive to the presence of a user. [Para 0029]. Further, Stone's switch may be connected to a timing switch for the purpose of deactivating the aspirator after a predetermined time. [Figs 1-3; Para. 0027]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Gandini with a photocell presence sensor and timer, as taught by Stone, to enable the user to activate the system without touching the toilet and facilitate automatic deactivation of the system after a predetermined time thereby conserving energy.

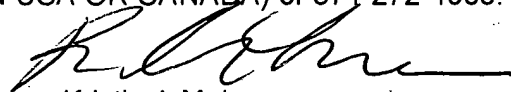
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie A. Mahone whose telephone number is (571) 272-3680. The examiner can normally be reached on Monday -Friday 8:30A.M-5 P.M..

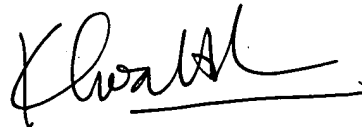
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kristie A Mahone  
Examiner  
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